

# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

OFFICE OF CHEMICAL SAFETY AND POLLUTION PREVENTION

December 29, 2021

Carrie Daniels
Authorized Agent to Bee Vectoring Technology, Inc.
Exponent, Inc.
1150 Connecticut Ave. NW
Suite 1100
Washington, D.C. 20036

Subject: Pesticide Registration Improvement Act (PRIA) Labeling Amendment – To Include New

Pouch Sizes and Update the Accompanying Directions for Use, Revise the Wording and Order of Crop Groupings, Remove the Expiration Date, Remove the Instructions to Use

the Product within 6 Months from the Date of Manufacture, Add Restrictions for Use in California, and Make Changes Requested by the EPA (e.g., Update the

Respirator Language)

Response to the Storage Stability and Corrosion Characteristics Term of Registration

Product Name: Vectorite with CR-7 EPA Registration Number: 90641-2 EPA Receipt Date: 06/24/2021 Action Case Number: 00307634

# Dear Ms. Daniels:

The amended labeling referred to above, submitted in connection with registration under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), as amended, is acceptable.

This approval does not affect any terms or conditions that were previously imposed on this registration. You continue to be subject to existing terms or conditions on your registration and any deadlines connected with them.

A stamped copy of your labeling is enclosed for your records. This labeling supersedes all previously accepted labeling. You must submit one (1) copy of the final printed labeling before you release this product for shipment with the new labeling. In accordance with 40 CFR § 152.130(c), you may distribute or sell this product under the previously approved labeling for 18 months from the date of this letter. After 18 months, you may only distribute or sell this product if it bears this new revised labeling or subsequently approved labeling. "To distribute or sell" is defined under FIFRA section 2(gg) and its implementing regulation at 40 § CFR 152.3.

Should you wish to add/retain a reference to your company's website on your label, then please be aware that the website becomes labeling under FIFRA and is subject to review by the U.S.

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Environmental Protection Agency (EPA). If the website is false or misleading, the product will be considered to be misbranded and sale or distribution of the product is unlawful under FIFRA section 12(a)(1)(E). 40 CFR § 156.10(a)(5) lists examples of statements the EPA may consider false or misleading. In addition, regardless of whether a website is referenced on your product's label, claims made on the website may not substantially differ from those claims approved through the registration process. Therefore, should the EPA find or if it is brought to our attention that a website contains or claims substantially differing from statements or claims made in connection with obtaining a FIFRA section 3 registration, the website will be referred to the EPA's Office of Enforcement and Compliance Assurance.

Your release for shipment of this product constitutes acceptance of these terms. If these terms are not complied with, this registration will be subject to cancellation in accordance with FIFRA section 6.

Additionally, in a memorandum dated November 17, 2021 (see one of the enclosures), the EPA rated submitted storage stability and corrosion characteristics data (MRID No. 51613501) as acceptable. Thus, you have fulfilled term #2 of the August 27, 2019, Vectorite with CR-7 Registration Notice.

If you have any questions, please contact Hannah Dean via email at dean.hannah@epa.gov.

Sincerely,

Jeannine Kausch, Product Manager 92 Microbial Pesticides Branch Biopesticides and Pollution Prevention Division (7511P) Office of Pesticide Programs

# Enclosures (2):

- EPA Memorandum Dated 11/17/2021
- Vectorite with CR-7 Stamped, Accepted Labeling

[Optional FRAC table:]

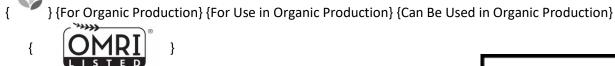


# Vectorite™ with CR-7

Vectorite with CR-7 is a broad-spectrum preventative {microbial biofungicide} {microorganism product} for the control or suppression of many important plant diseases (e.g., Botrytis or Gray Mold, Sclerotinia, and Monilinia) and is designed to be applied to crops by {commercially reared} {honey bees} {or} {bumble bees}, exclusively using Bee Vectoring Technology Inc. (BVT)-approved hive dispensers.

# {Biofungicide}

{Powder Biofungicide for {Bumble} {or} {Honey} Bee Vectoring}



**ACTIVE INGREDIENT:** *Clonostachys rosea* strain CR-7\*......5.00% **OTHER INGREDIENTS:**......95.00% 

\*Vectorite with CR-7 contains not less than 3 X 10<sup>8</sup> CFU/g.

# ACCEPTED

Dec 29, 2021

Under the Federal Insecticide, Fungicide and Rodenticide Act as amended, for the pesticide registered under EPA Reg. No. 90641-2

# **KEEP OUT OF REACH OF CHILDREN CAUTION**

FIRST AID		
If inhaled	Move person to fresh air.	
	• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.	
	Call a poison control center or doctor for treatment advice.	
HOTHING NUMBER		

# **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378, Monday through Friday, 8:00 AM to 12:00 PM Pacific Time. In the event of a medical emergency, call your poison control center at 1-800-222-1222.

{For Additional Precautionary Statements and Directions for Use: See Inside Booklet.} {See insert label for Precautionary Statements, Directions for Use, and Storage and Disposal.}

**EPA Reg. No.:** 90641-2

**EPA Est. No.:** 

# Net Weight: xx oz {xx grams} of total Vectorite with CR-7

{XX VectorPak™ trays for bumble bee hives: each tray containing xx oz {xx grams} of Vectorite with CR-7} {XX VectorPak™ cartridges for honey bee hives: each cartridge containing xx oz {xx grams} of Vectorite with CR-7}

{XX VectorPak™ {bags} {pouches} for honey bee hives: each {bag} {pouch} containing xx oz {xx grams} of Vectorite with CR-7}

[The net weight of the appropriate individual container will also be reflected on the tray/cartridge/bag/pouch label.]

# {Batch} {Lot} No:

# Manufactured by:

Bee Vectoring Technology Inc. (BVT) 4160 Sladeview Crescent #7 Mississauga, ON L5L OA1 Canada {email and website} {phone number}

{Made in Canada}

Vectorite<sup>™</sup> is a trademark of Bee Vectoring Technology Inc.
VectorPak<sup>™</sup> is a trademark of Bee Vectoring Technology Inc.
{US Patents: {US 9,380,777 B2}, {US 9,968,099 B2}, {US 9,758,758 B2}, {US 10,273,445 B2}}

{Read the {WARRANTY} {CONDITIONS FOR SALE AND LIMITATIONS OF WARRANTY AND LIABILITY} section before use. Use of this product indicates acceptance of the terms presented in the {WARRANTY} {CONDITIONS FOR SALE AND LIMITATIONS OF WARRANTY AND LIABILITY} section.}

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS

**CAUTION:** Harmful if inhaled. Avoid breathing dust. Remove and wash contaminated clothing before reuse.

Use of this product requires working in an environment with live bees and exercising caution when doing so is therefore required. Individuals can have allergic reactions to bee stings ranging from temporary pain and discomfort to a severe allergic reaction that may require emergency treatment. Refrain from working with or around bees, if you have confirmed severe allergic reactions to bee stings. **Call 911 or other emergency services**, if you're having a serious reaction to a bee sting that suggests anaphylaxis, even if it's just one or two signs or symptoms. If you were prescribed an emergency epinephrine autoinjector (EpiPen, Auvi-Q, and others), use it as your doctor directed.

When working with bee hives, follow local/industry guidelines to ensure safe working distance from dwellings, roads, and people.

# PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- Long-sleeved shirt and long pants
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

In conjunction with the PPE specified above, protective bee suits must be worn by individuals who will interact with the bee hives (e.g., individuals that place or refill the {trays} {or} {cartridges} with fresh product).

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

# **USER SAFETY RECOMMENDATIONS**

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. If worn, wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses - Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling. Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the State or Tribal agency responsible for pesticide regulation.

Read entire label before using this product.

[The following two statements will only appear on final printed labeling with honey bee applications.] Commercial Honey Bee Management: This product has not been completely evaluated for effects on bee brood under the labeled use conditions. Monitor your hives and contact the registrant (1-647-660-5119) if effects are observed.

# **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard, 40 CFR Part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses, and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification, and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about restricted-entry interval. The requirements in this box apply to uses of this product that are covered by the Worker Protection Standard.

There is no restricted-entry interval (REI) for this product.

#### PRODUCT INFORMATION

Vectorite with CR-7 is a broad-spectrum preventative product for the control or suppression of many important plant diseases (e.g., *Botrytis* or Gray Mold, *Sclerotinia*, and *Monilinia*) and for improvement of plant health, growth, and vigor. The carrier, **Vectorite** powder, is offered in {single-use} {**VectorPak** trays} {and} {or} {**VectorPak** cartridges} {or} {pre-filled **VectorPak** {bags} {pouches}} that are designed for optimum acquisition of the microbial active ingredient by {bumble bees} {or} {honey bees} and its subsequent delivery to plants during the bloom period. Vectorite with CR-7 must only be used with BVT-approved hive dispensers.

# **BIOLOGICAL PROPERTIES AND MODE OF ACTION**

The active ingredient in Vectorite with CR-7, *Clonostachys rosea* strain CR-7, is a {biological control agent} {microorganism} that acts to outcompete plant pathogens on target crops, enhances plant resistance to pathogens (through induced systemic resistance or ISR), and improves plant health, growth, and vigor. *Clonostachys rosea* strain CR-7 was isolated from the root of a wheat plant in Canada.

Clonostachys is ecologically a pioneer colonizer of senescing or stressed plant tissues. Clonostachys rosea strain CR-7 is applied preventatively, so it has enough time to block Botrytis and other pathogens by spatial occupation of flower and leaf tissues. Tissue stress or senescence (such as by pathogens) triggers rapid growth of Clonostachys rosea strain CR-7, such that it densely occupies the tissues before pathogens such as Botrytis. Pathogens do not displace Clonostachys species under normal conditions.

After application to the plant, *Clonostachys rosea* strain CR-7 establishes within the tissues and remains alive but localized where it was applied. Retreatment is necessary to cover new foliage and flowers.

Retreatment may also be necessary following a fungicide application, such as in an integrated pest management (IPM) program. Plant health benefits often result in greater yields or quality of produce at harvest, especially when crops are stressed by pathogens or environmental conditions.

# **INTEGRATED PEST MANAGEMENT (IPM)**

Vectorite with CR-7 can be integrated into an overall disease and pest management strategy. Some fungicides could temporarily inhibit the colonization of the active ingredient on the plant; however, the use of Vectorite with CR-7 in the BVT system continuously replenishes the microorganism. Follow disease management practices that are known to reduce disease development. Consult local agricultural authorities for specific IPM strategies developed for your crop(s) and location. If certain conditions persist where the bees cannot fly, and pest or disease pressure becomes excessive, close hives before spraying chemical or biological pesticides to protect the bees. Reopen the hives after the proper interval indicated on the label of the product sprayed. For any chemical or biological pesticide sprayed, consult the label for any potential effect on bees.

#### **COMPATIBLITY**

Vectorite with CR-7 must be used as is and is not to be altered or mixed with other components.

# **CROP TOLERANCE**

Vectorite with CR-7 applied by {bumble} {or} {honey} bees has been shown to provide good crop safety under normal growing conditions.

# **USE INSTRUCTIONS**

[Begin Optional Bumble Bee Section]

**Commercial Bumble Bees – Hive Placement and Replacement:** 

Bumble bees deliver product up to 400 yards, so place hives accordingly. Follow your bumble bee supplier's instructions for hive replacement. Depending on the type of hive, replace hives every 4-10 weeks, or if hives suffer a large population loss and/or are no longer active.

The BVT system comprises a bumble bee domicile (hive) with its in-lid dispenser that accepts the Vectorite with CR-7 **VectorPak** trays.

Manage bumble bees according to standard practices for the cropping system (indoor or outdoor) used in the region. Inspect the bee colonies (within the domicile or hive) for strength and incidence of disease before use. Reject or remove weak or dead colonies from the site. Place the hives level in suitable places for deployment on the target crop (in a greenhouse or hoop house, or in or at the edge of the field) at the density as directed in the **PLANT DISEASES AND APPLICATION RATES** table. Do not place hives in low areas subject to water pooling or flooding. If in the field, place the hives on stands and provide waterproof covers for shade and protection from rain, with all of this being held in place with weight to prevent wind damage to the hives. Keep the area around the entrances of the hives free of weeds and grass that would impede bee activity.

When interacting with the hives, work smoothly and avoid jarring them and agitating the bees within. Use protective clothing that is standard for working with bees. Follow the stepwise instructions (included in the hive packaging) for proper set-up of bee hives.

The health of the hives is the responsibility of the grower. If a hive arrives dead, it must be replaced. Adding new trays and ensuring the hives are open are also the responsibility of the grower.

# If Applying Pesticides Other Than Vectorite with CR-7:

Close the gates of the hives to prevent any bees from flying during the spray. Reopen the gates after the proper interval per the label of the applied pesticide. There is a potential hazard for bumble bees, if a hive is closed greater than 24 hours in hot weather (temperatures exceeding 80°F) and/or there is low food supply within the hive.

# **Placing or Replacing VectorPak Trays:**

Vectorite with CR-7 **VectorPak** trays for bumble bees are preloaded with product. Place one tray per each hive. To place or replace the trays:

- 1. Close both the in and out gates to the hive.
- 2. Open the {bee hive lid} {box lid} to reveal the plastic inner bee liner and the flip lid.
- 3. Open the flip lid, take out {any used} {blank} {or} {empty} tray(s) from the dispenser, and dispose of according to label instructions.
- 4. Take the new, unopened tray and lightly shake to make the powder level.
- 5. Remove the foil by pulling the corner and peeling back. Properly dispose of the foil.
- 6. Place the new tray in the dispenser and close the flip lid.
- 7. Close the {bee hive lid} {box lid}.
- 8. Open both gates fully.
- 9. Check the **PLANT DISEASES AND APPLICATION RATES** table (below) to see frequency of tray changes {tray flips}. The best time to {change trays} {flip trays} is in the early morning hours before the bees are active.

# [End Optional Bumble Bee Section]

# [Begin Optional Honey Bee Section]

**Commercial Honey Bees – Hive Placement and Replacement:** 

# For honey bees, contact a qualified beekeeper for advice about handling.

Although honey bees can forage several miles, they only deliver product up to 400 yards; thus, place hives accordingly. Ask a qualified beekeeper about hive placement and stocking density to maximize foraging and Vectorite with CR-7 delivery. Replace hives as instructed by a beekeeper or if hives suffer a loss and are no longer active.

Manage honey bees according to standard beekeeping practices for the region in which they are being used (state and local apiarists can assist). Inspect hives for strength and incidence of disease before use. Reject and remove weak or dead colonies from the site. Place the hives level in suitable places for deployment on the target crop (in or at the edge of the field) at the density as directed in the **PLANT DISEASES AND APPLICATION RATES** table. Do not place hives in low areas subject to flooding. Keep the area around the entrances of the hives free of weeds and grass that would impede bee activity.

To allow the bees to become familiar with the system and the crops, install a dispenser in the hive a few days before loading a blank **VectorPak** cartridge. When interacting with the hives, work smoothly and

avoid jarring them and agitating the bees within. Use protective clothing that is standard for working with bees.

[Directions for placing or replacing VectorPak cartridges]

# **Placing or Replacing VectorPak Cartridges:**

Vectorite with CR-7 **VectorPak** cartridges for honey bees are preloaded with product. Place one cartridge per each hive. To place or replace the cartridges:

- 1. Turn the cartridge latch counterclockwise and pull the cartridge {drawer} out from the dispenser.
- 2. Take out {any used} {blank} {or} {empty} cartridge(s), and dispose of according to label instructions.
- 3. Take the new, unopened cartridge and lightly shake to make the powder level.
- 4. Remove the foil by pulling the corner and peeling back. Properly dispose of the foil.
- 5. Place the new cartridge in the dispenser and press until there is an audible "click." Turn the latch clockwise to secure the cartridge in place.
- 6. Push the cartridge {drawer} back into the dispenser.
- 7. Check the **PLANT DISEASES AND APPLICATION RATES** table (below) to see frequency of {cartridge changes} {cartridge flips}. The best time to {change cartridges} {flip cartridges} is in the early morning hours before the bees are active.

[Directions for filling cartridges with the contents of VectorPak {bags} {pouches}] Filling VectorPak Cartridges with the Contents of VectorPak {Bags} {Pouches}:

Vectorite with CR-7 **VectorPak** {bags} {pouches} for honey bees are premeasured with product to fill **VectorPak** cartridges. To fill the cartridges:

- 1. Turn the cartridge latch counterclockwise and pull the cartridge {drawer} out from the dispenser.
- 2. Open the cartridge lid.
- 3. Tear open the {bag}{s} {pouch}{es} and fully empty the contents into the cartridge. [Optional text for 2.7 oz (75 gram) pouches:] {When using 2.7 oz {(75 gram)} VectorPak refill {bags} {pouches}, two {bags} {pouches} may be used to completely fill the cartridge with a total of 5.3 oz {(150 grams)} of product.} {Tear open the {bag}{s} {pouch}{es} and fully dispense the contents of both 2.7 oz {(75 gram)} {bags} {pouches} to completely refill the cartridge.}
- 4. Use the edge of the {bag}{s} {pouch}{es} to evenly spread and level the contents of the cartridge. Dispose of the empty {bag}{s} {pouch}{es} according to label instructions.
- 5. Close the cartridge lid.
- 6. Push the cartridge {drawer} back into the dispenser and secure it by turning the latch clockwise.
- 7. Check the **PLANT DISEASES AND APPLICATION RATES** table (below) to see frequency for refilling cartridges with the contents of {a} new {bag}{s} {pouch}{es}. The best time to refill cartridges is in the early morning hours before the bees are active.

[End Optional Honey Bee Section]

# PREHARVEST INTERVAL (PHI)

There is no PHI for this product. Vectorite with CR-7 can be applied up to the day of harvest.

# **PLANT DISEASES AND APPLICATION RATES**

[Note to reviewer: The replacement timing for the **VectorPak** trays, cartridges, bags, and pouches is dependent upon their net weight. Larger sizes will be replaced less frequently. Replacement frequency will be within 2-21 days with a tighter range indicated on the final printed labeling.]

CROP OR CROP GROUPING	DISEASE	APPLICATION INSTRUCTIONS
Bulb Vegetables: Garlic, Leek, Onion, Shallot, and Other Bulb Vegetables	Botrytis, Colletotrichum (Anthracnose){†}, Fusarium{†}, Sclerotinia	2 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Brassica (Cole) Leafy Vegetables: Broccoli, Cauliflower, Cabbage, Brussels Sprouts, Collards, Kale, Mustard Greens, Kohlrabi, and Other Brassica (Cole) Leafy Vegetables	Alternaria{†}, Botrytis, Fusarium{†}, Sclerotinia	1 hive/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Legumes Vegetables (Succulent or Dried): Beans, Broad Bean, Chickpea (Garbanzo Bean), Lentil, Peas, Pigeon Pea, Soybean, and Other Legumes Vegetables (Succulent or Dried)	Colletotrichum (Anthracnose){†}, Botrytis	2 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.

CROP OR CROP GROUPING	DISEASE	APPLICATION INSTRUCTIONS
Fruiting Vegetables: Eggplant, Sweet and Hot Peppers, Tomatillo, Tomato, Okra, and Other Fruiting Vegetables	Alternaria{†}, Botrytis, Colletotrichum (Anthracnose){†}, Fusarium{†}	2-7 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
		[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days} <sup>§</sup> during bloom.
Cucurbit Vegetables: Cucumber, Melons, Gourd, Pumpkin, Squash, Watermelon, and Other Cucurbit Vegetables	Alternaria{†}, Botrytis, Didymella{†}	2 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx
		days}§ during bloom.  [Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Pome Fruit: Apple, Mayhaw, Pears, Quince, and Other Pome Fruit	Alternaria{†}, Monilinia{†}	4-6 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.
		[Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
		[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Stone Fruit: Apricot, Cherries, Nectarine, Peach, Plums,	Monilinia{†}	4-6 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.
Prune (Fresh), and Other Stone Fruit		[Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
		[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.

CROP OR CROP GROUPING	DISEASE	APPLICATION INSTRUCTIONS
Berries: Blackberry, Blueberry, Currant, Elderberry, Gooseberry, Huckleberry,	Alternaria{†}, Botrytis (Gray Mold), Colletotrichum	1-4 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.
Loganberry, Raspberry, and Other Berries	(Anthracnose){†}, <i>Monilinia</i> (Mummy	[Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
(see separate grouping for strawberry)	Berry){†}, Sclerotinia	[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days} <sup>§</sup> during bloom.
Kiwifruit	Botrytis	4-6 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.
		[Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
		[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Strawberry	Alternaria{†}, Botrytis (Gray Mold), Colletotrichum	1-3 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.
	(Anthracnose){†}, Sclerotinia	[Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
		[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Tree Nuts: Almond, Beechnut, Brazil Nut, Butternut, Cashew, Chestnut, Filbert, Hickory	Colletotrichum (Anthracnose){†}, Monilinia{†}, Sclerotinia	4-6 hives/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.
Nut, Macadamia Nut, Pecan, Pistachio, Walnut, and Other Tree Nuts		[Bumble bee label] Replace <b>VectorPak</b> trays every {xx-xx days}§ during bloom.
and other free Nuts		[Honey bee label] {Replace <b>VectorPak</b> cartridges} {or} {Refill dispenser cartridges with <b>VectorPak</b> {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.

CROP OR CROP GROUPING	DISEASE	APPLICATION INSTRUCTIONS
Herbs and Spices: Basil, Coriander, Dill, Sage, and Other Herbs and Spices	Alternaria{†}, Botrytis, Colletotrichum (Anthracnose){†}, Fusarium{†}, Sclerotinia	1 hive/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Mint	Alternaria{†}, Botrytis, Colletotrichum (Anthracnose){†}, Fusarium{†}, Sclerotinia	1 hive/acre. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.
Oilseeds: Rapeseed, Canola, Mustard Seed, Sunflower, and Other Oilseeds	Sclerotinia	1-6 hives/acre for rapeseed, canola, mustard seed, and other oilseeds. 0.3-1 hive/acre for sunflower. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.

CROP OR CROP GROUPING	DISEASE	APPLICATION INSTRUCTIONS
Flowers: Cut Flowers including but not limited to Roses & Carnations; Bedding Plants	Botrytis	1 hive/1000 square foot of greenhouse space. Place bee hives 4 days prior to first bloom, place product at first bloom, and replace product, as indicated immediately below, throughout bloom.  [Bumble bee label] Replace VectorPak trays every {xx-xx days}§ during bloom.  [Honey bee label] {Replace VectorPak cartridges} {or} {Refill dispenser cartridges with VectorPak {bag}{s} {pouch}{es} contents} every {xx-xx days}§ during bloom.

[§Begin Note to Reviewer: The replacement timing presented in the tables below and corresponding to the net weight of the trays, cartridges, pouches, or bags will be used on the final printed labeling where indicated.

Bumble Bees			
VectorPak™ Trays - Net Weight	Replacement Timing		
0.39 oz (11 grams)	3-7 days		
0.42 oz (12 grams)	3-7 days		
0.46 oz (13 grams)	3-7 days		
0.53 oz (14 grams)	3-7 days		
0.56 oz (15 grams)	3-7 days		

Honey Bees			
VectorPak™ Cartridges - Net Weight	Replacement Timing		
5.3 oz (150 grams)	3-7 days		
7.1 oz (200 grams)	3-9 days		
8.8 oz (250 grams)	4-11 days		
10.6 oz (300 grams)	4-14 days		

VectorPak™ {Bags} {Pouches} - Net Weight	Replacement Timing
2.7 oz (75 grams)	2-5 days
4.7 oz (135 grams)	3-9 days
5.3 oz (150 grams) {2 pouches: 2.7 oz (75 grams)}	3-10 days
7.1 oz (200 grams)	4-13 days
8.8 oz (250 grams)	5-16 days
10.6 oz (300 grams)	6-20 days

End Note to Reviewer]

# STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

**Pesticide Storage:** Store in a dry, refrigerated place (~39°F (~4°C)) in original container. Keep from overheating.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry). Do not hold product for use in the subsequent season.

Container Handling: {VectorPak trays} {and} {or} {VectorPak cartridges} {or} {VectorPak {bags} {pouches}} are nonrefillable. Do not reuse or refill these containers. After use, offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities. If the outer box is contaminated, dispose of it in the same manner as required for {VectorPak trays} {and} {or} {VectorPak {bags} { pouches}}.

# **{WARRANTY} {CONDITIONS FOR SALE AND LIMITATIONS OF WARRANTY AND LIABILITY}**

#### **IMPORTANT: READ BEFORE USE**

Read the entire Directions for Use, Conditions, Disclaimer of Warranties, and Limitations of Liability before using this product. If terms are not acceptable, return the unopened product at once for a refund of the purchase price. By using this product, user or buyer accepts the following Conditions, Disclaimer of Warranties, and Limitations of Liability. These terms may only be modified by a written document signed by a duly authorized representative of Bee Vectoring Technology Inc.

**CONDITIONS:** The directions for use of this product must be followed carefully. However, it is impossible to eliminate all risks associated with the use of this product. Crop injury, ineffectiveness, or other unintended consequences may result because of such factors as weather conditions, the quality of the bees used, presence of other materials, or the manner of use or application, all of which are beyond the control of Bee Vectoring Technology Inc. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, all such risks shall be assumed by the user or buyer.

DISCLAIMER OF WARRANTIES: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, Bee Vectoring Technology Inc. MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR OF FITNESS FOR A PARTICULAR PURPOSE OR OTHERWISE, THAT EXTEND BEYOND THE STATEMENTS MADE ON THIS LABEL. No distributer of Bee Vectoring Technology Inc.'s products is authorized to make any warranties beyond those contained herein or to modify the warranties contained herein. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, Bee Vectoring Technology Inc. DISCLAIMS ANY LIABILITY WHATSOEVER FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT.

LIMITATIONS OF LIABILITY: TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE USER OR BUYER FOR ANY AND ALL LOSSES, INJURIES, OR DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT, WHETHER IN CONTRACT, WARRANTY, TORT, NEGLIGENCE, STRICT LIABILITY, OR OTHERWISE, SHALL NOT EXCEED THE PURCHASE PRICE PAID, OR AT Bee Vectoring Technology Inc.'s ELECTION, THE REPLACEMENT OF PRODUCT.

# [Text for Foil Cover on Each VectorPak Tray:]

[Optional FRAC Table – Will follow format from 1st page]

Clonostachys Rosea Strain CR-7 Group NC

Fungicide

Vectorite™ with CR-7

VectorPak™ Tray {with} CR-7

{Powder Biofungicide for Bumble Bee Vectoring}



} {For Organic Production} {For Use in Organic Production} {Can Be Used in Organic Production}



# KEEP OUT OF REACH OF CHILDREN CAUTION

{See insert label for First Aid, Precautionary Statements, Directions for Use, and Storage and Disposal.} {For Additional Precautionary Statements and Directions for Use: See Inside Booklet.}

**Container Handling: VectorPak** trays are nonrefillable. Do not reuse or refill this container. After use, offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

EPA Reg. No.: 90641-2 EPA Est. No.: XXXXX-XX-XXX

{Batch} {Lot} No: [Ink jet printed on tray]

Net Weight: xx oz {xx grams} of Vectorite with CR-7 Individual trays are not for resale

## Manufactured by:

Bee Vectoring Technology Inc. 4160 Sladeview Crescent #7 Mississauga, ON L5L 0A1 Canada {email and website} {phone number} {Made in Canada}

# [Text on Each VectorPak Cartridge, Bag, or Pouch:]

[Optional FRAC Table – Will follow format from 1st page]

Clonostachys Rosea Strain CR-7 Group

NC

Fungicide

Vectorite™ with CR-7

VectorPak™ {Cartridge} (Bag} (Pouch) { with} CR-7

{Powder Biofungicide for Honey Bee Vectoring}

1

} {For Organic Production} {For Use in Organic Production} {Can Be Used in Organic Production}



ACTIVE INGREDIENT: Clonostachys rosea strain CR-7\*.....5.00% OTHER INGREDIENTS: ......95.00% TOTAL: ......100.00% \*Vectorite with CR-7 contains not less than 3 X 108 CFU/g.

# KEEP OUT OF REACH OF CHILDREN CAUTION

{See insert label for First Aid, Precautionary Statements, Directions for Use, and Storage and Disposal.}{For Additional Precautionary Statements and Directions for Use: See Inside Booklet.}

**Container Handling: VectorPak** {cartridges} {bags} {pouches} are nonrefillable. Do not reuse or refill this container. After use, offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities.

EPA Reg. No.: 90641-2
EPA Est. No.: XXXXX-XX-XXX

{Batch} {Lot} No: [Ink jet printed on cartridge, bag, or pouch]

Net Weight: xx oz (xx grams) of Vectorite with CR-7 Individual {cartridges} {bags} {pouches} are not for resale

#### Manufactured by:

Bee Vectoring Technology Inc.
4160 Sladeview Crescent #7
Mississauga, ON L5L 0A1 Canada
{email and website} {phone number} {Made in Canada}

# [Text for Box Label:]

[Optional FRAC Table – Will follow format from 1st page]

Clonostachys Rosea Strain CR-7 Group

NC

Fungicide

Vectorite™ with CR-7

{Powder Biofungicide for {Bumble} {or} {Honey} Bee Vectoring}



} {For Organic Production} {For Use in Organic Production} {Can Be Used in Organic Production}



\*Vectorite with CR-7 contains not less than 3 X 108 CFU/g.

# KEEP OUT OF REACH OF CHILDREN CAUTION

#### FIRST AID

#### If inhaled:

- Move person to fresh air.
- If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.
- Call a poison control center or doctor for treatment advice.

#### **HOTLINE NUMBER**

Have the product container or label with you when calling a poison control center or doctor or going for treatment. For information on this pesticide product (including general health concerns or pesticide incidents), call the National Pesticide Information Center at 1-800-858-7378, Monday through Friday, 8:00 AM to 12:00 PM Pacific Time. In the event of a medical emergency, call your poison control center at 1-800-222-1222.

{See insert label for Precautionary Statements, Directions for Use, and Storage and Disposal.} {For Additional Precautionary Statements and Directions for Use: See Inside Booklet.}

#### PRECAUTIONARY STATEMENTS

#### HAZARDS TO HUMANS AND DOMESTIC ANIMALS - CAUTION

Harmful if inhaled. Avoid breathing dust. Remove and wash contaminated clothing before reuse.

Use of this product requires working in an environment with live bees and exercising caution when doing so is therefore required. Individuals can have allergic reactions to bee stings ranging from temporary pain and discomfort to a severe allergic reaction that may require emergency treatment. Refrain from working with or around bees, if you have confirmed severe allergic reactions to bee stings. **Call 911 or other emergency services**, if you're having a serious reaction to a bee sting that suggests anaphylaxis, even if it's just one or two signs or symptoms. If you were prescribed an emergency epinephrine autoinjector (EpiPen, Auvi-Q, and others), use it as your doctor directed.

When working with bee hives, follow local/industry guidelines to ensure safe working distance from dwellings, roads, and people.

#### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Applicators and other handlers must wear:

- •Long-sleeved shirt and long pants
- Shoes plus socks

Mixers/loaders and applicators must wear a minimum of a NIOSH-approved particulate filtering facepiece respirator with any N, R, or P filter; OR a NIOSH-approved elastomeric particulate respirator with any N, R, or P filter; OR a NIOSH-approved powered air-purifying respirator with an HE filter. Repeated exposure to high concentrations of microbial proteins can cause allergic sensitization.

In conjunction with the PPE specified above, protective bee suits must be worn by individuals who will interact with the bee hives (e.g., individuals that place or refill the {trays} {or} {cartridges} with fresh product).

Follow the manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables are available, use detergent and hot water. Keep and wash PPE separately from other laundry.

#### USER SAFETY RECOMMENDATIONS

- Users should wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet.
- Users should remove clothing/PPE immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Users should remove PPE immediately after handling this product. If worn, wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

#### **ENVIRONMENTAL HAZARDS**

For terrestrial uses - Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high-water mark. Do not contaminate water when disposing of equipment washwater or rinsate.

#### STORAGE AND DISPOSAL

Do not contaminate water, food, or feed by storage or disposal.

Pesticide Storage: Store in a dry, refrigerated place (~39°F (4°C)) in original container. Keep from overheating.

**Pesticide Disposal:** To avoid wastes, use all material in this container by application according to label directions. If wastes cannot be avoided, offer remaining product to a waste disposal facility or pesticide disposal program (often such programs are run by state or local governments or by industry). Do not hold product for use in the subsequent season.

Container Handling: {VectorPak trays} {and} {or} {VectorPak cartridges} {or} {VectorPak {bags} {pouches}} are nonrefillable. Do not reuse or refill these containers. After use, offer for recycling if available or dispose of in a sanitary landfill or by other procedures approved by state and local authorities. If the outer box is contaminated, dispose of it in the same manner as required for {VectorPak trays} {and} {or} {VectorPak cartridges} {or} {VectorPak {bags} { pouches}}.

EPA Reg. No.: 90641-2 EPA Est. No.: XXXXX-XXX

Net Weight: xx oz {xx grams} of total Vectorite with CR-7

{XX VectorPak™ trays for bumble bee hives: each tray containing xx oz {xx grams} of Vectorite with CR-7}

{XX VectorPak™ cartridges for honey bee hives: each cartridge containing xx oz {xx grams} of Vectorite with CR-7}

{XX VectorPak™ {bags} {pouches} for honey bee hives: each {bag} {pouch} containing xx oz {xx grams} of Vectorite with CR-7} [The net weight of the appropriate individual container will also be reflected on the tray/cartridge/bag/pouch label.]

#### Manufactured by:

Bee Vectoring Technology Inc. 4160 Sladeview Crescent #7 Mississauga, ON L5L 0A1 Canada

{email and website} {phone number} {Made in Canada}